Exhibit B

Michigan Department of Transportation 5100B (07/07)

# CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

| MDOT PROJECT MANAGER   |  |                                   | JOB NUMBER (JN)  | CONTROL SECTION (CS) |
|--|--|-----------------------------------|--|----------------------|
| ROGER TILL LEM 15  |  |                                   | 105131   | 25132                |
| DESCRIPTION IF NO JN   | I/CS                                       |                                   |  |                      |
| MDOT PROJECT MANAGER: Check all items to be included in RFP. |  |                                   | CONSULTANT: Provide only checked items below in proposal.  |                      |
| WHITE = REQUIRED<br>GRAY SHADING = OPTIONAL                  |  |                                   |  |                      |
| Check the appropriate Tier in the box below                  |  |                                   |  |                      |
| TIER I<br>(\$25,000-\$99,999)                                | TIER II<br>(\$100,000-<br>\$250,000)       | TIER III<br>(>\$250,000)          |  |                      |
|  | ×  |                                   | Understanding of Service   |                      |
|  | X  |                                   | Innovations  |                      |
|  | X  |                                   | Safety Program   |                      |
| N/A  | X  |                                   | Organization Chart   |                      |
|  | ×  |                                   | Qualifications of Team   |                      |
|  | ×  |                                   | Past Performance   |                      |
| Not required<br>as part of<br>official RFP                   | Not required<br>as part of<br>official RFP |                                   | Quality Assurance/Quality Control  |                      |
|  | ×  |                                   | Location: The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity. |                      |
| N/A  | N/A  |                                   | Presentation   |                      |
| N/A  | N/A  |                                   | Technical Proposal (if Presentation is required)   |                      |
| 3 pages (MDOT forms not counted) (No Resumes)                | 7 pages (MDOT forms not counted)           | 19 pages (MDOT forms not counted) | Total maximum pages for RFP not including key personnel resumes  |                      |

Michigan Department of Transportation 5100H (10/07)

# REQUEST FOR PROPOSAL

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest "Consultant/Vendor Selection Guidelines for Service Contracts" and "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services > Vendor/Consultant Selections.

| RFP SPECIFIC INFORMATION  |   |  |  |  |  |
|---|---|--|--|--|--|
| BUREAU OF HIGHWAYS BUREAU OF TRANSF   | PORTATION PLANNING **  OTHER  |  |  |  |  |
| THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQU  | JESTS FOR PROPOSALS   |  |  |  |  |
| NO  ✓ YES DATED 1/31/08   | THROUGH <u>3/31/08</u>  |  |  |  |  |
| tions.  | Non-Prequalifed Services - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed. |  |  |  |  |
| ✓ Qualifications Based Selection – Use Consultant/Vendor  | r Selection Guidelines  |  |  |  |  |
| For all Qualifications Based Selections, the section team will remost qualified to perform the services based on the proposals. The mation, that firm will be asked to prepare a priced proposal. Negotia   | selected vendor will be contacted to confirm capacity. Upon confir-   |  |  |  |  |
| **For RFP's that originate in Bureau of Transportation Planning only, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning (see address list, page 2). The priced proposal must be submitted in a sealed envelope, clearly marked "PRICE PROPOSAL." The vendor's name and return address MUST be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room. |   |  |  |  |  |
| For a cost plus fixed fee contract, the selected vendor must have tract. This type of system has a job-order cost accounting system for tracts. Each project is assigned a job number so that costs may be system.  | or the recording and accumulation of costs incurred under its con-  |  |  |  |  |
| Qualifications Review / Low Bid - Use Consultant/Vendo information.   | or Selection Guidelines. See Bid Sheet Instructions for additional  |  |  |  |  |
| For Qualification Review/Low Bid selections, the selection team will ron the MDOT website. The notification will be posted at least two be meet proposal requirements will be opened. The vendor with the lot confirm capacity.   | usiness days prior to the bid opening. Only bids from vendors that  |  |  |  |  |
| Best Value - Use Consultant/Vendor Selection Guidelines. bid amount is a component of the total proposal score, not   | See Bid Sheet Instructions below for additional information. The the determining factor of the selection.   |  |  |  |  |
| Low Bid (no qualifications review required - no proposinstructions.   | sal required.) See Bid Sheet Instructions below for additional  |  |  |  |  |

#### **BID SHEET INSTRUCTIONS**

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked "SEALED BID." The vendor's name and return address MUST be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

MDOT 5100H (10/07) Page 2 of 2

| PROPOSAL SUBMITTAL INFORMATION   |   |   |                       |  |  |
|--|---|---|-----------------------|--|--|
| REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER 4                        | PROP<br>11/24/                                      | OSAL/BID DUE DATE<br>08                     | TIME DUE<br>4:00 p.m. |  |  |
| PROPOSAL AND BID SHEET MAILING ADDRESSES                               | i   |   |                       |  |  |
| Mail the multiple proposal bundle to the MDOT Project Manager or Ot    | her indicated b                                     | elow.                                       |                       |  |  |
| ✓ MDOT Project Manager   |   | MDOT Other                                  |                       |  |  |
| Roger Till, LPM  |   |   |                       |  |  |
| Construction & Technology Division                                     |   |   |                       |  |  |
| 8885 Ricks Road, P.O. Box 30049  |   |   |                       |  |  |
| Lansing, Michigan 48909  |   |   |                       |  |  |
| Mail one additional stapled copy of the proposal to the Lansing Office | indicated below                                     | V.  |                       |  |  |
| Lansing Regular Mail   | OR  | Lansing Overnight Mail                      |                       |  |  |
| Secretary, Contract Services Div - B470                                |   | Secretary, Contract Services Div - B470     |                       |  |  |
| Michigan Department of Transportation                                  |   | Michigan Department of Transportation       |                       |  |  |
| PO Box 30050   | 425 W. Ottawa                                       |   |                       |  |  |
| Lansing, MI 48909  |   | Lansing, MI 48933                           |                       |  |  |
| Contract Administrator/Selection Specialist                            |   | Contract Administrator/Selection Specialist |                       |  |  |
| Bureau of Transportation Planning B470                                 |   | Bureau of Transportation Planning B470      |                       |  |  |
| Michigan Department of Transportation PO Box 30050                     | Michigan Department of Transportation 425 W. Ottawa |   |                       |  |  |
| PO Box 30050<br>Lansing, MI 48909                                      | Lansing, MI 48933                                   |   |                       |  |  |

#### **GENERAL INFORMATION**

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal

#### MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D - Request for Proposal Cover Sheet

5100G - Certification of Availability of Key Personnel

**5100I** – Conflict of Interest Statement

(These forms are not included in the proposal maximum page count.)

# Michigan Department of Transportation

# SCOPE OF SERVICE FOR NOISE BARRIER INSPECTION AND DESIGN SERVICES

**CONTROL SECTION**: 25132

**JOB NUMBER:** 105131

# **PROJECT LOCATION:**

The project shall consist of ALL soundwalls located within MDOT Right of Way (ROW) along I-475, between Kearsley St and Saginaw Rd, within the city of Flint, in Genesee County between Kearsley Street in the city of Flint, and Saginaw Road in Genesee Township, in Genesee County. All non-field work will be done at the Consultant's Office, except project meetings, which shall occur at the Lansing Construction and Technology Building.

# PROJECT DESCRIPTION:

Work involved in the design of the project consists of obtaining, reviewing, analyzing and incorporating project data and recommendations for all work related to the preparation of the Preliminary Scoping and the Final Scoping Package for the project.

**ANTICIPATED SERVICE START DATE:** March 2, 2009

**ANTICIPATED SERVICE COMPLETION DATE:** 6 months from Authorization

# PRIMARY PREQUALIFICATION CLASSIFICATION(S):

**Bridge Safety Inspections** 

# **SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

N/A

**DBE REQUIREMENT**: N/A

#### MDOT PROJECT ENGINEER MANAGER:

Name and Classification: Roger Till, Licensed Engineer Manager 15

**Department:** Transportation **Address:** 8885 Ricks Road **Phone Number:** (517)322-5682 **Fax:** (517)322-5664 (mailroom) **Email:** tillr@michigan.gov

# **REQUIRED MDOT GUIDELINES AND STANDARDS:**

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., AASHTO Guide Specifications for Structural Design of Sound Barriers, 1989, and subsequent interim changes or the most recent version, FHWA Highway Noise Barrier Design Handbook, Report No.FHWA-EP-00-005, February 2000, Michigan Manual of Uniform Traffic Control Devices, etc.).

Consultant is required to use MDOT's current version of Bentley MicroStation for CADD applications and Bentley GEOPAK for road design. Consultant shall comply with all MDOT CADD standards and file naming conventions.

## SCOPE OF CONSULTANT DUTIES

The CONSULTANT shall prepare a Preliminary and Final Scoping Package for the project location. As part of this contract, the CONSULTANT shall prepare and evaluate proposed treatments for each soundwall segment, within the project location, and shall determine the extent and cost of all work required for its implementation.

For the project, complete the Scoping. This will include, but will not be limited to, the following:

- A. Verify the project location, the limits and the extents.
- B. Conduct field reviews, perform a soundwall inventory, condition survey, and prepare a log.
- C. Identify sound wall locations and soundwall types (i.e. brick, wood, concrete, metal, berm, concrete block, concrete block faux brick, concrete cast in place, and combinations of these materials)
- D. Label noise barriers using control sections (example W01-54041 for walls or E01-63102 for earth berms).
- E. Establish criteria for recommending treatments, to include a description of implementation for each of the treatments. The CONSULTANT shall consult the related institutes (i.e. Masonry, Concrete, timber) regarding treatment options, evaluation criteria and procedures for treatment implementation.
- F. Recommend treatment for each sound wall segment.
- G. Identify suppliers (a minimum of 3), implementation limitations (i.e. seasonal/temperature limitations, proprietary items, etc), and procedures.
- H. Prepare required documents (to include summary, treatment details, photographs, etc) required to answer all questions relating to the project scope of work (See Attachment A).

- I. Compute and verify all quantities.
- J. Compute and calculate detailed cost estimate.
- K. Identify and provide solutions to any unique problems that may arise during the design of the project or that may affect the constructability including site access.

#### PROJECT DESCRIPTION

Conduct in-service inspection, condition survey, and quantify amount and type of structural and aesthetic deficiencies of traffic noise barriers for 15 noise wall structures along I-475 in the city of Flint.

Obtaining, reviewing, analyzing and incorporating project data and recommendations for all work related to the preparation of the Preliminary Scoping and the Final Scoping Package for the project, which includes but is not necessarily limited to the following:

# PRELIMINARY SCOPING PACKAGE

A Preliminary Scoping Package shall be submitted on or before **four months from authorization** for MDOT review and comment. The Preliminary Scoping Package shall address all the items listed under Section I. CONSULTANT DUTIES, Attachment A and Section XI. CONSULTANT RESPONSIBILITIES GENERAL (excluding CD's of electronic files to be submitted in Final Deliverable Package).

In the Preliminary Scoping Package, if there are any items, in the CONSULTANTS opinion, that need further review, discussion and/or additional information is needed from MDOT, those items shall be clearly listed on a cover sheet accompanying the Preliminary Scoping Package.

Before the spreadsheets are submitted, a preliminary copy (both hard copy and electronic format) shall be sent to the Project Manager for review and approval as to form and content.

#### FINAL SCOPING PACKAGE

A Final Scoping Package shall be submitted on or before five months from authorization. The Final Scoping Package shall address and document all the items listed under Section I. CONSULTANT DUTIES, Attachment A and Section XI. CONSULTANT RESPONSIBILITIES GENERAL (excluding CD's of electronic files to be submitted in Final Deliverable Package). The Final Scoping Packages shall also incorporate the comments and/or changes received from the Preliminary Scoping Package and the Preliminary Scope Review meeting.

#### FINAL DELIVERABLE PACKAGE

A single Final Deliverable Package shall be submitted on or before six months from authorization. The Final Deliverable Package shall include the CD's for all items, and all correspondence from items, under Section XI. CONSULTANT RESPONSIBILITIES (GENERAL).

All work shall conform to current applicable MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Roadside Design Guide, AASHTO Road Side Design Guide, AASHTO A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

# PROJECT CONSTRUCTION COST

For the project location a cost estimate shall be developed. The cost estimate shall include an adjustment for inflation (2% annual rate). The following are the items that shall be considered:

- A. The estimated construction cost shall address:
  - 1. Safety Related Work
  - 2. Sound wall Repair Items
  - 3. Detours and Maintaining Traffic
  - 4. Miscellaneous
- B. The estimated total cost to design the project.
- C. The estimated number of real estate parcels and type (grading permit, easement or fee).

# **PROJECT SCHEDULE**

The scheduled completion date for the Preliminary Scoping Package is four months, the Final Scoping Package is five months and the Final Deliverable Package is six months. The CONSULTANT shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant's Monthly Progress Reports. A minimum of 13 working days will be needed for MDOT review of the Preliminary Scoping Package.

Time after authorization Description

Four months Submittal of Preliminary Scoping Packages

Four and one half months

Five months

Preliminary Scope Review Meeting
Submittal of Final Scoping Package

Six months Final Deliverable Package

#### **CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:**

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau

of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

The use of overtime hours is not acceptable unless prior <u>written</u> approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager. Reimbursement for overtime hours that are allowed will be limited to time spent <u>on this project</u> in excess of forty hours per person per week. Any variations to this rule should be included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

The hours billed for inspectors will not begin until the inspectors report to the project site or to the project office.

#### MONTHLY PROGRESS REPORT

On the first of each month, the Consultant shall submit a monthly project progress report to the Consultant Coordinator. The monthly progress report shall follow the guidelines in Attachment C.

#### **FORMAT**

The Preliminary and Final Scoping Packages (see Attachment A for items that will be included) shall be presented on regular letter size paper 8 ½" x 11" with the exception of detail sheets, which may be on 11" x 17" paper (and folded to match the 8 ½" x 11" papers). A cover sheet indicating Control section, Job Number, Route, and location description and an index shall also be included in each package.

There shall be 4 copies of each Preliminary Scoping Package and Final Scoping Package. One copy of the existing plans used to develop the scope shall also be submitted with the Preliminary and Final Scoping Packages.

The **Preliminary Scoping Package** will each be stapled in the upper left hand corner. If there are any items, in the CONSULTANTS opinion, that need further review, discussion and/or additional information is needed from MDOT, those items shall be clearly listed on a cover sheet accompanying the Preliminary Scoping Package. The photographs included in the documents shall be in an electronic .jpg format with printouts at 4" x 6", in color, labeled with the location (physical description and wall segment identification number), direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Packages.

The **Final Scoping Package** will be presented in a labeled (cover and side to list control section, job number, route and location with the paper color to be determined by the Project Manager) three ring binder, with an index and tabbed sections, containing regular letter size paper 8 ½" x 11" for the majority of the documents. 11" x 17" paper may be used for detail sheets. The photographs included in the documents shall be in an electronic .jpg format with printouts at 4" x 6", in color, labeled with the location (physical description and wall segment identification number), direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Packages.

The **Final Deliverable Package** information shall be presented in a labeled (cover and side to be entitled "CS 25132 JN 105131 I-475 Soundwall Inspection; Correspondence and CD's") three ring binder, with an index and tabbed sections. The hard copies of the correspondence shall be presented on regular letter size paper 8 ½" x 11". For the project, a single CD ROM shall be prepared for the electronic files of the existing wall details and treatment details (.dgn file). A single separate CD ROM shall be prepared for the projects electronic files of the photos (.jpg files) and location map (file type subject to MDOT approval). The summary sheets (Word files for text and Excel files for quantity calculations) shall also be presented on a separate CD ROM. Each CD ROM shall be contained in a separate envelope labeled with the control section, job number, project location and the CD contents. Each envelope shall be included as part of the package and shall be attached and connected through the 3 ring binder. Form of connection shall be approved by the Project Manager.

The proposed sound wall treatment details, as identified in Attachment A, are to be created electronically, using the MicroStation design software, and following all MDOT drafting standards and guidelines. The details are to be created in English units and are to be placed within a single approved MDOT printed sheet. The full size of the MDOT printed sheet is 3ft x 2ft, however, only an 11" x 17", a reduced size copy, needs be provided.

All spreadsheets for quantity calculations and estimates shall be created using Excel (.xls files). All text summary spreadsheets shall be created using Word (.doc files). Before the spreadsheets are submitted, a preliminary copy (both hard copy and electronic format) shall be sent to the Project Manager for review and approval as to form and content.

All estimates and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager.

All project related items are subject to review and approval by the Project Manager.

# TRAFFIC CONTROL AND MDOT PERMITS

The CONSULTANT shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Design Services.

The CONSULTANT shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Joe Rios, Utilities/Permits Section, Real Estate Division at (517) 241-2103.

# PRE-QUALIFICATION AND SUBCONTRACTING OF CONTRACT WORK

Any task(s) for which the CONSULTANT is not prequalified must be completed by a SUBCONTRACTOR that is pre-qualified for that task(s). Any questions regarding prequalification should be directed to Phil Brooks, Prequalification Manager, at (517)335-2514. The Department's prequalification is not a guarantee or warranty of the SUBCONTRACTOR'S ability to perform or complete the work subcontracted. The CONSULTANT remains fully responsible to the Department for completion of the work according to the authorization as if no portion of it had been subcontracted.

All SUBCONTRACTOR communications with the Department shall be through the CONSULTANT to the Project Manager for Scoping.

The Department may direct the immediate removal of any SUBCONTRACTOR working in violation of this subsection. Any costs or damages incurred are assumed by the CONSULTANT by acceptance of authorization. It is further understood that the CONSULTANT'S responsibilities in the performance of the contract, in case of an approved subcontract, are the same as if the CONSULTANT had handled the work with the CONSULTANT'S own organization.

# **CONSULTANT RESPONSIBILITIES (GENERAL)**

- 1. The Project Manager shall be the official MDOT contact person for the CONSULTANT. The CONSULTANT must either address or send a copy of all correspondence to the Project Manager. This includes all SUBCONTRACTOR correspondence and verbal contact records. The Project Manager shall be made aware of all communications regarding this project.
- Meet with the Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The CONSULTANT shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the project scoping by the project completion date. Attention shall be given to critical target dates that may require a large lead-time, such as, submittal of the Preliminary Scoping Package, Scope Review Meeting, etc.

- 3. Maintain a Scoping Project Record that includes a history of significant events (changes, comments, etc.), which influenced the development of the scope, dates of submittals and receipt of information.
- 4. The CONSULTANT shall contact, in writing, the Project Manager whenever discoveries or design alternatives have the potential to require significant changes in the limits, quantities, costs, or rights-of-way of the project.
- 5. Attend any project-related meetings as directed by the Project Manager.
- 6. The CONSULTANT shall record and submit type-written minutes for all project related meetings to the Project Manager within two weeks of the meeting. The CONSULTANT shall also distribute the minutes to all meeting attendees.
- 7. The CONSULTANT shall use (W for walls; E for earth berms) and control section numbers to label noise structures (example W01-54041 for walls or E01-63102 for earth berms).
- 8. Generate sound wall details, created electronically (.dgn files) using the MicroStation design software and formatted as described in Section VIII FORMAT, of the existing wall segments for each type of wall using information from old plans, and/or, on site field reviews. The details are to visually describe the existing wall types within the limits of the project. The details are to show existing features of the wall segment.
- 9. Perform a sound wall condition survey and prepare a log. The survey shall be completed for each wall segment for the entire wall (each face, both ends and top of each wall segment) within the project limits.
  - The survey and log shall at a minimum address the following: sound wall identification, wall location (including GPS points of at beginning and ending of wall, along with changes in alignment), wall type, wall height, segment length, number of existing joints, location of existing joints, number of joints where limestone cap has lifted if applicable, location of damage, general condition, recommended treatments, and other comments as necessary.
- 10. Recommended sound wall treatments shall have a minimum expected service life of 5 years.
- 11. The CONSULTANT shall consult the Masonry, Concrete, and Timber Institutes regarding treatment options, evaluation criteria and procedures for treatment implementation. All communications with the Institutes shall be documented and follow XI. CONSULTANT RESPONSIBILITIES (GENERAL) item #1 and shall be submitted with the Monthly Progress Report.
- 12. Establish criteria for the evaluation of treatment options from which treatment recommendations will be made. Criteria should be broken down for each of the recommended wall treatments for each existing wall type.

- 13. Recommend wall treatments for each existing wall segment. Provide detailed materials specifications (i.e. brick color matching, seasonal limitations on material application/installation, etc) for the wall treatments and sources for those materials (a minimum of 3).
- 14. Develop written procedures for treatment implementation for each of the recommended treatments for each existing wall types. Provide detailed procedures describing how the treatments will be implemented (i.e. construction techniques, access requirements, seasonal limitations, etc).
- Generate treatment details, created electronically (.dgn files) using the MicroStation design software, and formatted as described in Section VIII FORMAT, for each of the recommended wall treatments, and their implementation, for the wall segments for each existing wall type. The details are to visually describe the proposed treatments and their implementation for each existing wall type within the limits of the project. There may be more than one detail per combination of existing wall type and recommended treatment to completely show treatments and/or implementation procedures (i.e. for the same treatment, implementation procedures may be different due to ROW and/or traffic restrictions).
- 16. Determine impacts of the proposed wall treatments for each existing wall segment on right of way (ROW). Every effort shall be made to minimize ROW impacts within the limits of the projects. In areas of potential ROW impacts, the CONSULTANT shall request, in writing, copies of ROW maps from the Project Manager (requests may take up to two weeks from the date the request is received to fill) and document and identify the potential need for additional ROW, by station or address, type of ROW required (grading permit, easement or fee), and reason (i.e. temporary access for construction, turf establishment, landscaping, etc.)
- 17. Document and identify any possible utility conflicts.
- 18. Review and document the roadside safety related items (i.e. guardrail, barriers, attenuators, etc.) which may need to be modified or included in the project. Documentation to include location, existing type and condition, and the recommended treatment. This information shall be included in the appropriate section of Attachment A.
- 19. Document and identify (location and who has responsibility for) any existing lighting and/or ITS work which may be impacted.
- 20. Develop Maintaining Traffic. See Attachment D.
- 21. Compute and verify all quantities for each segment of wall.
- 22. Estimates are to be as detailed as possible. Generate a Detailed Cost Estimate, for each type of repair, in spread sheet format.

Costs shall be for each wall segment subtotaled and totaled to obtain the total construction cost for the project. Cost estimate shall be based on previous or current working knowledge of similar projects. Unit costs shall be derived through direct involvement with masonry/concrete/timber contractors and suppliers.

A separate estimate for Construction Engineering and Preliminary Engineering (Design) shall be developed. The Construction Engineering estimate will be based on a percentage of the Construction Costs, as directed by the Project Manager.

- Identify, contact and coordinate with all affected governmental agencies (County, City and/or Township) within the project limits (and directly abutting if any part of the construction influence area will be within another agencies area). Coordination will involve, at a minimum, an initial letter stating the project and requesting local input, within 30 days, in the development of the detailed scope. A follow up letter, if no response is given, and a final letter stating the process that occurred and what the final scope will be to all affected governmental agencies. There may be the need to attend meetings and receive and return telephone calls from the affected agencies. Any and all local requests with shall be reviewed with MDOT before any commitment to work shall be given to the affected agencies. MDOT shall be informed of any meeting with the affected agencies a minimum of 72 hours in advance of the meeting. All discussions with agencies shall be documented and submitted with the monthly progress reports.
- 24. Incorporate any MDOT identified and/or approved (if approved, include copy of MDOT approval) local needs/requests into project scope.
- 25. Provide photographs and digital files (.jpg files) of the existing wall segments, areas of repair and roadside conditions to document the needs as identified in the project scope.
- 26. Prepare a spreadsheet summary for the project. The spreadsheet shall be prepared as stated in Section VIII FORMAT.
- 27. Prepare a spreadsheet summary of any local coordination that occurred. The summary shall document the planning/coordination process that occurred with each of the affected local agencies for the project. The summary shall include, at a minimum, specifically what was sent to who and when, what was received from who and when, and what responses were made (and why) to who and when. The spreadsheet shall be prepared as stated in Section VIII FORMAT.

# MDOT RESPONSIBILITIES (GENERAL)

- A. Schedule and/or conduct the following:
  - 1. Project related meetings.
  - 2. Coordinate all scoping activities that require MDOT personnel.
- B. Furnish prints of old plans of the area, if available.

# ATTACHMENT A CS 25132 – JOB NUMBER 105131

# Soundwall inspection, along I-475, between Kearsley St and Saginaw Rd

# The Preliminary and Final Scoping Packages

The Preliminary and Final Scoping Packages shall be prepared for the project. The packages shall contain the following, and shall be assembled in the order as listed.

# 1. Location Map

A location map shall show a map of the project area showing the roadway name, roadway number, project beginning, project ending, project length, major cross streets, interchanges and local municipalities affected.

# 2. Sign off sheet

A sheet listing the members of the Consultant's Scoping Team (the members name, members signature and area of contribution). Also on this sheet, the Consultant is to list all the sources used in establishing existing information (old plans used, date of on site visits, etc).

#### 3. Summary

A project specific Summary (see Attachment B).

#### 4. Detailed Cost Estimate

Estimated are to be as detailed as possible. Generate a Detailed Cost Estimate, for each type of repair, in spread sheet format.

Costs shall be for each wall segment subtotaled and totaled to obtain the total construction cost for the project.

Cost estimate shall be based on previous or current working knowledge of similar projects. Unit costs shall be derived through direct involvement with material contractors and suppliers.

A separate estimate for Construction Engineering and Preliminary Engineering (Design) shall be developed. The Construction Engineering estimate will be based on a percentage of the Construction Costs, as directed by the Project Manager.

## 5. Evaluation Criteria

Provide criteria developed to evaluate the wall treatments. Criteria should be broken down for each proposed wall treatment for each existing wall type.

#### 6. Proposed Soundwall Treatment Detail

Generate proposed sound wall treatment details, for each sound wall treatment, for each sound wall type. The treatment details are to visually depict the wall treatments and how they are to be implemented (i.e. need for scaffolding, need for vehicular access etc.) within the limits of the project. There may be more than one detail per wall type to completely show treatments and/or

implementation procedures (i.e. implementation procedure may be different for the available ROW and/or traffic restrictions).

The MDOT reviewer, by viewing the details, should be able to understand the existing wall types, the proposed wall treatment for the various types of walls, and work that is expected to implement the project. For example, if additional right of way, or scaffolding, will be required, the details should provide a visual explanation as to why so that the MDOT reviewers can evaluate options.

The proposed soundwall treatment details, as identified in Attachment A, are to be created electronically, using the MicroStation design software, and following all MDOT drafting standards and guidelines. The details are to be created in English units and are to be placed within a single approved MDOT printed sheet. The full size of the MDOT printed sheet is 3ft x 2ft, however, only an 11" x 17", a reduced size copy, needs be provided. The plans are to be folded to match the regular letter size paper  $8\frac{1}{2}$ " x 11".

# 7. Photographs

Provide photographs and digital files (.jpg files on attached CD ROM) of the existing soundwall conditions to document the needs as identified in the project scope. The photographs included in the documents shall be 4" x 6", in color, labeled with the location (physical description and wall segment identification number), direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point. A minimum of one photo for each type of repair or fix, for each wall type is required.

# 8. Materials Specifications & Sources

Provide detailed materials specifications for the major items of work, which may cause problems or complications during construction (i.e. brick color matching, seasonal limitations on material application/installation, etc). Material specifications to include possible sources and suppliers for these materials.

# 9. MDOT Maintaining Traffic Recommendation

If available, the actual MDOT Maintaining Traffic constraints recommendation (i.e.: meeting minutes, memo, letter, e-mail, etc.).

#### 10. Correspondence

(MDOT, Masonry and Concrete Institutes, Local, etc)

#### 11. Quantity Calculations

#### 12. Condition Survey and Log

#### 13. Scoping Project Record

See Section XI, of the CONSULTANT RESPONSIBILITIES (GENERAL), Item # 3.

# ATTACHMENT B CS 25132 – JOB NUMBER 105131

# Soundwall inspection, along I-475, between Kearsley St and Saginaw Rd

# **Scope of Work Summary**

The Summary is the complete written description and explanation, of the entire project scope.

The Summary shall be written using complete sentences and sentence structure. In addition, simple, clear and concise language is required to ensure that the Summary is both readable and understandable.

Also, the listed format contains many sections which may, or may not, apply to the project. Sections which do not apply may be omitted from the Summary. Information which has no apparent section, may either be placed within a related section, or within a newly created section. Keep the addition of new sections to a minimum.

# Scope of Work Summary Date:

Control Section: Job Number: Route Number:

# **Brief Project Description:**

# **Limits of Project**

Establish the projects limits (roadway name, roadway number, project beginning, project ending, mile points, project length, major cross streets, local municipalities affected, etc).

# **Summary of Detailed Cost**

A summary of the total estimated construction cost after scoping.

# **Existing Wall Types**

A brief description of each of the existing wall types within the project limits.

For each wall type, include the total wall length, the number of included wall segments, the overall wall condition and the percent of wall segments needing repair.

# **Proposed Treatment(s)**

For each wall type, and for each different type of repair, explain the existing condition, and the recommended treatments.

# **Implementation Procedure(s)**

Provide a detailed written procedure describing how each of the treatments will be implemented (i.e.: construction techniques, access requirements or limitations, seasonal limitations, etc)

#### Right of Way

A brief statement addressing the existing right of way, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments). If additional right of way is required, note location and type (fee take, grading permit, easement, etc). If there is no impact to right of way, state such.

#### **Maintaining Traffic Issues**

A statement addressing how traffic will be maintained during construction.

#### **Construct ability Issues**

A statement addressing areas where the scoping team feels needs to be reviewed from a construct ability standpoint.

#### **Guardrail and Attenuators**

A brief statement addressing the existing guardrail and attenuators, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

# **Local Concerns**

A brief statement addressing local concerns or issues, and the impact that these issues may have on the proposed project

# **Environmental Issues**

Include a brief statement addressing any existing environmental issues, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments). Determine if MDNR permits will be required for the work to proceed.

# **Utilities**

A brief statement addressing the existing utilities present within the area, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

# ATTACHMENT C CS 25132 – JOB NUMBER 105131 Soundwall inspection, along I-475, between Kearsley St and Saginaw Rd

# **MONTHLY PROGRESS REPORTS**

This shall be the necessary layout of the Monthly progress reports.

Control Section 25132 Job Number 105131 Structure Number W01/E01 Date 00/00/00

#### MONTHLY PROGRESS REPORT

A. Work accomplished during the previous month.
B. Anticipated work items for the upcoming month.
C. Real or anticipated problems on the project.
D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.
E. Items needed from MDOT.
F. Copy of Verbal Contact Records for the period (attached).

# **ATTACHMENT D CS 25132 - JN 105131**

# Soundwall inspection, along I-475, between Kearsley St and Saginaw Rd

# **DEVELOP MAINTAINING TRAFFIC**

#### 1. SCOPE

This procedure covers the initial development of a plan to maintain and control traffic during construction.

#### 2. WORK STEPS

- A. Review the type of construction task(s) included in the project.
- B. Contact the Project Manager and request a meeting with the Region Traffic & Safety Engineer (allow a minimum of 2 weeks for a meeting date to be determined). Review the traffic data and the project site to determine project specific construction zone traffic requirements. Requirements shall be consistent with the constraints identified at the meeting with the Region Traffic & Safety Engineer. Any necessary or recommended exceptions shall be clearly identified and justification provided..
- C. Prepare preliminary written recommendations for maintaining traffic. Items that SHALL be included in the recommendations at a minimum are:
  - I. Method for maintaining traffic.
  - ii. Need for detour, staging and/or flagging operation.
  - iii. Need for temporary widening and/or shoulder upgrading.
  - iv. Time constraints and laneage requirements.
  - v. Local considerations (school buses, emergency vehicles, large traffic generators, etc.).
  - vi. Need for temporary traffic signals (a minimum of two signal heads in view at all times).
  - vii. Construction zone speed limits.
  - viii. Special events (parades, festivals, etc.).
  - ix. Recommendations for expedited construction.
- D. Submit the recommendations with the Preliminary Scoping Package.
- E. Receive any items returned by the Project Manager and/or from meetings at which maintaining traffic has been discussed, as incomplete or deficient and make the necessary revisions.
- F. Submit the revised recommendations with the Final Scoping Package.